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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Price et al	) Group Art Unit:	1771
Serial No.:	09/916,116	)	
Filed:	July 26, 2002	) Examiner:	V. Chang
For:	COMPRESSIBLE FOAM TAPES AND METHOD OF MANUFACTURE THEREOF	)	

SECOND DECLARATION PURSUANT TO 37 C.F.R. § 1.132

By Facsimile: 703-872-9306

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I, Brett W. Killhenny declare as follows:

1. I am a co-inventor of the above-referenced patent application, the " '116 application".

2. I have read and understood the '116 application and the Final Office Action dated November 25, 2003. I have further read and understood U.S. Patent No. 3,839,087 to Birchall et al.

3. Flexography tapes for flexographic printing generally comprise a reinforcing film (for example polyethyleneterephthalate (PET)) adhered to a foam. A first adhesive on one side of the foam is used to adhere the tape to the printing cylinder, and a second adhesive on one side of the reinforcing film is used to adhere the tape to the printing plate.

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4. The present invention is directed to flexography tapes comprising a polyurethane foam. It has been found that when a polyurethane foam is used, the tape is not cleanly removable from the printing cylinder and/or plate.

5. As described in my previous declaration, we have unexpectedly developed evidence that clean removal of the flexography tape is prevented by internal (cohesive) failure of the reinforcing layer, and not failure of the bond between the foam and the reinforcing layer. Evidence of cohesive failure of the reinforcing layer includes scanning electron micrographs and ESCA data of the surfaces of the polyurethane foam and the reinforcing layer. It was further found that washing the surface of the reinforcing layer prior to casting the foam, which would be expected to improve the bond strength between the foam and the reinforcing layer, failed to yield tapes that could be cleanly removed.

6. Another experiment was designed to test whether clean removal of the tape is due to cohesive failure of the reinforcing layer, rather than the strength of the bond between the foam and the reinforcing layer. In this experiment, a polyurethane foam as described in the '116 application was cast onto a 2 mil PET reinforcing layer. The foam was then crosshatched as described in the '116 application and peeled off of the reinforcing layer by hand. The foam peeled off with relative ease. The peeled surface of the foam was observed to have a characteristic "frosted" appearance on the side that was stripped from the PET, indicating the presence of a thin PET layer on the foam. Next, a second polyurethane foam was cast onto the same side of the same PET reinforcing layer. The crosshatch and peel test was repeated. Again, the foam peeled off with relative ease, and was observed to have a frosted appearance indicative of the presence of PET on the surface of the peeled foam.

8. It can therefore be concluded that the second foam was separated from the reinforcing layer as a result of cohesive failure of the reinforcing film, rather than a weak boundary layer at the surface of the PET film. If removal were the result of a weak boundary layer at the surface of the PET film, this layer would have been removed along with the first

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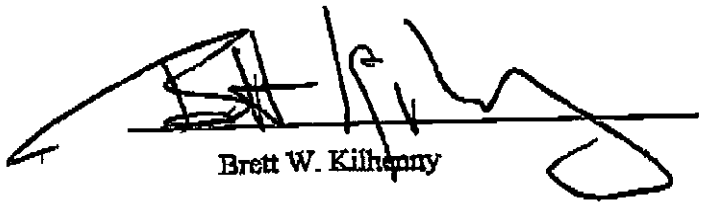
foam layer, and no PET would have been observed on the surface of the second foam layer. The lack of adequate cohesive strength in the PET reinforcing layer does not, therefore, appear to be the result of inadequate surface cleaning or a weak boundary layer.

8. I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or document or any patent resulting therefrom.

Date: 5/25/04



Brett W. Kilheny